=> d his

(FILE 'HOME' ENTERED AT 12:01:24 ON 01 AUG 2006)

FILE 'REGISTRY' ENTERED AT 12:01:35 ON 01 AUG 2006

L1 STRUCTURE UPLOADED

L2 3 S L1

L3 17 S L1 FULL

FILE 'CAPLUS' ENTERED AT 12:03:08 ON 01 AUG 2006

L4 9 S L3

=> d que l4 stat

L1 STR

G1 [@1], [@2], [@3], [@4]

Structure attributes must be viewed using STN Express query preparation.

L3 17 SEA FILE=REGISTRY SSS FUL L1

L4 9 SEA FILE=CAPLUS ABB=ON PLU=ON L3

=> d 1-9 bib abs hitstr

```
ANSWER 1 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
L4
       2005:429623 CAPLUS
ΑN
DN
       142:483395
      Method of dyeing or printing textile fiber materials using reactive dyes
ΤI
       Schmiedl, Juergen; Mundle, Wolfgang
IN
       Ciba Specialty Chemicals Holding Inc., Switz.
PA
       PCT Int. Appl., 38 pp.
so
       CODEN: PIXXD2
DT
       Patent
LA
      English
FAN.CNT 1
                                                                                             DATE
      PATENT NO.
                                  KIND
                                            DATE
                                                            APPLICATION NO.
                                  ----
                                             -----
                                                             _____
                                            20050519
PΙ
       WO 2005045125
                                   A1
                                                             WO 2004-EP52742
                                                                                             20041101
            W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                  NE, SN, TD, TG
PRAI EP 2003-104150
                                            20031111
OS
      MARPAT 142:483395
AB
      A method for dyeing or printing textile fiber materials comprises
       treatment of fiber by reactive dye containing anionic group followed by
      aftertreatment with compound which reduces the ionic character of the
       anionic group in the dye, and with ≥1 nucleophilic compound The
       described method yields dyeings or prints having deep hues and very good
       fastness properties.
ΙT
      704893-00-5
      RL: RCT (Reactant); TEM (Technical or engineered material use); RACT
       (Reactant or reagent); USES (Uses)
           (dye; dyeing or printing textile fiber with reactive anionic dyes
           combined with aftertreatment by metal salts and nucleophiles to obtain
           improved wet fastness and deep hues)
       704893-00-5 CAPLUS
RN
       2-Anthracenesulfonic acid, 1-amino-4-[[4-[[4-chloro-6-[[3-
CN
       (ethenylsulfonyl)phenyl]ethylamino]-1,3,5-triazin-2-yl]amino]-2-
       sulfophenyl]amino]-9,10-dihydro-9,10-dioxo- (9CI) (CA INDEX NAME)
```

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 2 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
L4
AN
    2004:493794 CAPLUS
DN
     141:55763
    Reactive dyes for dyeing or printing synthetic fibers and their
TI
     preparation
     Schmiedl, Juergen; Schoehn, Damien; Koch, Klaus
IN
    Ciba Specialty Chemicals Holding Inc., Switz.
PA
SO
     PCT Int. Appl., 27 pp.
    CODEN: PIXXD2
     Patent
DT
    English
LA
FAN.CNT 1
```

	PATENT NO.					APPLICATION NO.				DATE									
PI				A2 20040617		WO 2003-EP50878													
		W :	AE, CO, GH, LR, OM, TN, BW, BY,	AG, CR, GM, LS, PG, TR, GH, KG,	AL, CU, HR, LT, PH, TT, GM, KZ, FR,	AM, CZ, HU, LU, PL, TZ, KE, MD, GB,	AT, DE, ID, LV, PT, UA, LS, RU, GR,	AU, DK, IL, MA, RO, UG, MW, TJ,	AZ, DM, IN, MD, RU, US, MZ, TM, IE,	BA, DZ, IS, MG, SC, UZ, SD, AT, IT,	EC, JP, MK, SD, VC, SL, BE, LU,	EE, KE, MN, SE, VN, SZ, BG, MC,	EG, KG, MW, SG, YU, TZ, CH, NL,	ES, KP, MX, SK, ZA, UG, CY, PT,	FI, KR, MZ, SL, ZM, ZM, CZ, RO,	GB, KZ, NI, SY, ZW, ZW, DE, SE,	GD, LC, NO, TJ, AM, DK, SI,	GE, LK, NZ, TM, AZ, EE, SK,	
	ΑIJ	2003	-	-	-	-	•	•	-	•	•		•	•			SN, 0031	TD, 124	TG
	AU 2003294033 EP 1567599							EP 2003-789448											
		R:			•	DE, LV,	•	•		•	•		•	•		•	•	PT,	
	BR	2003	•	•	•	•	•		•	•	•	•	•	•	•	•		124	
	CN	1720	299			Α		2006	0111	CN 2003-80104773				2	0031	124			
	JP	2006	5082	25		T2	:			JP 2004-556327									
		2006						2006	0126	1	US 2	005-	5366'	79		2	0050	527	
PRAI									1202										
os		2003 PAT :				W	:	2003	1124										

GI

AB The reactive dyes I (R1 = (un)substituted C1-4 alkyl; R2 = halogen, C1-4 alkyl, C1-4 alkoxy or sulfo; Z1 = -SO2Y, -CONH(CH2)kSO2Y, -NHCOCH(Hal)CH2Hal, -NHCOC(Hal):CH2; Hal = chlorine or bromine; Y = vinyl, -CH2CH2U; U = a group removable under alkaline conditions; k = 2-6, n = 0-2; m = 0 or 1) are suitable for dyeing or printing cellulose-containing fiber materials, preferably natural or synthetic polyamide fibers to give good fastness properties.

Ι

IT 704893-00-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of reactive dyes for dyeing or printing synthetic fibers)

RN 704893-00-5 CAPLUS

CN 2-Anthracenesulfonic acid, 1-amino-4-[[4-[[4-[[4-chloro-6-[[3-(ethenylsulfonyl)phenyl]ethylamino]-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]amino]-9,10-dihydro-9,10-dioxo-(9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1987:638574 CAPLUS

DN 107:238574

TI Reactive dyes for cotton

IN Kato, Yoshiaki

PA Mitsubishi Chemical Industries Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62172062	A2	19870729	JP 1986-13375	19860124
	JP 06062873	B4	19940817		
PRAI GI	JP 1986-13375		19860124		

AB The title dyes were prepared having the general formula I [D = monoazo, polyazo, metal-containing azo, anthraquinone, phthalocyanine, formazan dye residue; R1 = H, (un)substituted alkyl; X = halogen; Y = H, halogen, (un)substituted alkyl; Z = CH:CH2, CH2CH2OSO3H]. 3,5-(H2N)2C6H3SO2CH2CH2OSO3H was condensed 1:2 (molar) with 2-[4-(2,4-dichloro-s-triazin-6-ylamino)-2-methylphenylazo]naphthalene-4,8-disulfonic acid and salted to give the corresponding I, yellow on cotton. The dyes prepared can be used with disperse dyes in 1-bath-1-step dyeing of polyester-cotton blends.

Ι

IT 111363-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (dye, for cotton)

RN 111363-26-9 CAPLUS

CN 1,6-Anthracenedisulfonic acid, 8,8'-[[5-(ethenylsulfonyl)-1,3-phenylene]bis[imino(6-chloro-1,3,5-triazine-4,2-diyl)imino(3-sulfo-4,1-phenylene)imino]]bis[5-amino-9,10-dihydro-9,10-dioxo-(9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

Ι

L4 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1986:111322 CAPLUS

DN 104:111322

TI Reactive dyes with β -chlorovinylsulfonyl groups. VII. Synthesis of anthraquinone dyes with β -chlorovinyl groups

AU Stefaniak, Stanislaw

CS Zakl. Chem. "Organika-Zachem", Bydgoszcz, Pol.

SO Chemia Stosowana (1984), 28(3-4), 449-58 CODEN: CHSWAP; ISSN: 0376-0898

DT Journal

LA Polish

GΙ

AB The synthesis of 13 I (R, R1, R2 = H, SO3Na; R3 = H, Me, OMe) from the appropriate aminophenylanthraquinonesulfonates and aminophenyl chlorovinyl sulfones and cyanuric chloride [108-77-0] was described. I, reddish blue to greenish blue on cotton, had good fastness to acid, alkali, perspiration, washing at ≤95°, dry rubbing, and light.

IT 100849-08-9P 100849-17-0P 100849-18-1P

100849-19-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and fastness properties of, on cotton)

RN 100849-08-9 CAPLUS

CN 2-Anthracenesulfonic acid, 1-amino-4-[[4-[[4-chloro-6-[[5-[(2-chloroethenyl)sulfonyl]-2-methylphenyl]amino]-1,3,5-triazin-2-yl]amino]-3-sulfophenyl]amino]-9,10-dihydro-9,10-dioxo-, monosodium salt (9CI) (CA INDEX NAME)

RN 100849-17-0 CAPLUS

CN 2-Anthracenesulfonic acid, 1-amino-4-[[4-[[4-chloro-6-[[3-[(2-chloroethenyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-3-sulfophenyl]amino]-9,10-dihydro-9,10-dioxo-, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

●2 Na

RN 100849-18-1 CAPLUS

CN

2-Anthracenesulfonic acid, 1-amino-4-[[4-[[4-chloro-6-[[5-[(2-

chloroethenyl)sulfonyl]-2-methylphenyl]amino]-1,3,5-triazin-2-yl]amino]-3-sulfophenyl]amino]-9,10-dihydro-9,10-dioxo-, disodium salt (9CI) (CA INDEX NAME)

RN 100849-19-2 CAPLUS

CN 2-Anthracenesulfonic acid, 1-amino-4-[[4-[[4-chloro-6-[[5-[(2-chloroethenyl)sulfonyl]-2-methoxyphenyl]amino]-1,3,5-triazin-2-yl]amino]-3-sulfophenyl]amino]-9,10-dihydro-9,10-dioxo-, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

●2 Na

L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1982:440314 CAPLUS

DN 97:40314

TI Reactive anthraquinone dyes

PA Nippon Kayaku Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI JP 57042985	A2	19820310	JP 1980-115948	19800825		
PRAI JP 1980-115948		19800825				
GT .						

$$(HO_3S)_p \xrightarrow{O} NH_2 SO_3H SO_2R^4$$

$$R^1 \xrightarrow{CH_2} nN \xrightarrow{N} NH$$

$$R^1 \xrightarrow{CH_2} nN \xrightarrow{N} NH$$

$$R^2 \xrightarrow{SO_3H} (SO_3H)_m C1$$

AB Fiber-reactive dyes of free acid form I (R = H, Me, Et; R1, R2, R3 = H, Me, Et, MeO, halogen; R4 = CH2CH2OSO3H, CH2CH2SSO3H, CH2CH2OP(OH) 3, CH2CH2Cl, CH:CH2; R5 = H, Cl, SO3H, m = 0, 1, 2; n = 0, 1; p = 0, 1] were prepared and used for dyeing cotton, rayon, and polyamide fibers in blue shades. For example, cyanuric chloride [108-77-0] was condensed with o-H2NC6H4SO2CH2CH2OSO3H [81092-83-3] and then 1-amino-4-(4-amino-3-sulfoanilino)anthraquinone-2-sulfonic acid [81-69-6] and salted to give I [3-(SO3H)m bonding, 4-(CH2)nNR- bonding; R = R1 = R2 = R3 = R5 = H; R4 = CH2CH2OSO3H; n = p = 0; m = 1; Na salt] [82381-72-4], blue on cotton.

IT 82381-75-7

RL: MSC (Miscellaneous)

(dyes, for cotton and rayon and polyamide fibers)

RN 82381-75-7 CAPLUS

CN 2,6-Anthracenedisulfonic acid, 1-amino-4-[[4-[[4-chloro-6-[[2-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-3-sulfophenyl]amino]-9,10-dihydro-9,10-dioxo-, sodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A | NH₂

●x Na

IT 82381-72-4
 RL: MSC (Miscellaneous)
 (dyes, for cotton and rayon and polyamide fibers, manufacture of)
RN 82381-72-4 CAPLUS
CN 2-Anthracenesulfonic acid, 1-amino-4-[[4-[[4-chloro-6-[[2-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-3-sulfophenyl]amino]-9,10-dihydro-9,10-dioxo-, sodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

NH₂

●x Na

L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1976:123403 CAPLUS

DN 84:123403

TI Fiber-reactive anthraquinone dyes

IN Shirosaki, Toshitaka; Yamada, Yasushi

PA Nippon Kayaku Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI	JP 50157422	A2	19751219	JP 1974-66564	19740613	
PRAI	JP 1974-66564	· A	19740613			

GI For diagram(s), see printed CA Issue.

The title compds. [I [58618-90-9] and II (R = CBr:CH2 or CHBrCH2Br] are prepared from cyanuric chloride (III) [108-77-0], the appropriate substituted (aminoanilino)anthraquinone, and H2N(RCONH)C6H3SO3H. Thus, 19.5 parts III dissolved in 120 parts Me2CO was poured into 100 parts ice-water. A solution of 53.2 parts 1-amino-4-(3-amino-2,4,6-trimethyl-5-sulfoanilino)anthraquinone-2-sulfonic acid [24124-40-1] in 500 parts H2O was added at 0-5° while the pH was maintained at 4-6 with 10% Na2CO3 solution A solution of 35.3 parts 2,4-H2N(CH2:CBrCONH)C6H3SO3H [58557-59-8] in 400 parts H2O was then added and the mixture heated 3 hr at 45° and pH 4-7 to give I, fast blue on wool. Three II were similarly prepared

IT 58618-89-6P

RL: IMF (Industrial manufacture); PREP (Preparation)
 (preparation of)

RN 58618-89-6 CAPLUS

CN 2-Anthracenesulfonic acid, 1-amino-4-[[4-[[4-[[4-[[4-[(2-bromo-1-oxo-2-propenyl)amino]-2-sulfophenyl]amino]-6-chloro-1,3,5-triazin-2-yl]amino]-3-sulfophenyl]amino]-9,10-dihydro-9,10-dioxo- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

 $\begin{matrix} | & || \\ \mathtt{NH_2} & \mathtt{O} \end{matrix}$

L4 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1968:437111 CAPLUS

DN 69:37111

TI Water-soluble fiber reactive anthraquinone dyes

PA Imperial Chemical Industries Ltd.

SO Fr., 5 pp. CODEN: FRXXAK

DT Patent

LA French

FAN. CNT 1

	O10 1						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	FR 1490242		19670728	FR 1966-73933	19660823		
	DE 1644565			DE			
	US 3397207		19680813	US 1966-570735	19660808		
PRAI	GB		19650823				
	GB		19660805				

AB Compds. of structure I are light- and washfast dyes for cellulosic fibers. Thus, a solution of 9.2 parts tri-Na 1-amino-4-(4'-aminoanilino)anthraquinone-2,3',5-trisulfonate in 150 parts H2O was added during 20 min. to a stirred suspension of 2.8 parts cyanuric chloride in 100 parts H2O and 25 parts acetone at 0-5°. The mixture was stirred for 20 min. at constant pH (addition of 2N Na2CO3), clarified, and treated at 35-40° and pH 6-7 in 1 hr. with a solution of 3.6 parts 4-H2NC6H4SO2CH2CH(OH)CH2Cl in 40 parts acetone, kept at 45-60° for 6 hrs., treated with 15 parts NaCl, filtered, washed with 5% NaCl solution, and vacuum-dried at 20° to give a dye containing 2 atoms of hydrolyzable Cl/mol., greenish blue on cotton. Other I were similarly prepared (X, position of SO3Na and amino substituents on ring A, Y, Z, Q, W, and shade given): SO3Na, 3, 4, Cl, N, CONH, Cl, greenish blue; H, 4, 3, Cl, CCN, CONH, OSO3Na, reddish blue; H, 3, 4, SO3Na, N, S, Cl, blue; H, 4, 3, SO3Na, N, S, Cl, blue.

IT 16618-02-3P

RL: IMF (Industrial manufacture); PREP (Preparation)
 (preparation of)

RN 16618-02-3 CAPLUS

CN 1,6-Anthracenedisulfonic acid, 5-amino-8-[4-[[4-chloro-6-[p-[(3-chloro-2-hydroxypropyl)sulfonyl]anilino]-s-triazin-2-yl]amino]-3-sulfoanilino]-9,10-dihydro-9,10-dioxo-, trisodium salt (8CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

●3 Na

Page 19 10/536,679

```
ANSWER 8 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
L4
AN
    1968:14084 CAPLUS
     68:14084
DN
    Fiber reactive anthraquinone dyes
TI
    Eckersley, Dennis; Barben, Ian K.
IN
     Imperial Chemical Industries Ltd.
PA
SO
    Brit., 6 pp.
     CODEN: BRXXAA
DT
    Patent
LA
    English
FAN.CNT 1
    PATENT NO.
                        KIND
                                DATE
                                           APPLICATION NO.
                                                                   DATE
                                            -----
                        _ _ _ _
                                -----
PΙ
    GB 1086996
                                19671011
                                           GB 1965-36026
                                                                   19650823
GI
    For diagram(s), see printed CA Issue.
    Water-soluble anthraquinone derivs. of the general formula I are prepared as
AB
    reactive dyes for cellulose. In I, Q = N or CCN, R = SO3H or H, X = Cl,
    or SO3H, or NHCO, and Z = Cl or OSO3H. Thus, a solution of 9.2 parts solution
    of tri-Na 1-amino-4-(4-amino-3-sulfoanilino)anthraquinone-2,5-disulfonate
     (II) in 150 parts H2O is added over 20 min. to a stirred suspension of 2.8
    parts cyanuric chloride (III) in 100 parts H2O and 25 parts Me2CO at
    0-5°. The mixture is stirred for 20 min. at 0-5°, clarified,
    treated with 3.6 parts 4-H2NC6H4SO2CH2CH0HCH2Cl in 40 parts Me2CO at pH
    6-7 stirred for 1 hr. at 35-40° and for 6 hrs. at 45-50°
    with addition of aqueous Na2CO3 to maintain pH 6-7, treated with 15 parts NaCl,
    stirred for 1 hr., and filtered to give IV, which dyes cellulose in
    greenish blue shades of good fastness to light and washing. Similarly,
    other I are prepared (intermediates used and shade given): II, III,
     4-H2NC6H4CONHCH2CHOHCH2Cl, greenish-blue; 1-amino-4-(3-amino-4-
    sulfoanilino) anthraquinone-2-sulfonic acid (V), 5-cyano-2,4,6-
    trichloropyrimidine, 4-H2NC6H4CONHCH2CHOHCH2OSO3H, reddish blue;
     1-amino-4-(4-amino-3-sulfoanilino)anthraquinone-2-sulfonic acid, III,
    4-H2NC6H4SCH2CHOHCH2Cl (VI), blue; V, III, VI, blue.
TT
    16618-02-3P
    RL: IMF (Industrial manufacture); PREP (Preparation)
        (preparation of)
RN
     16618-02-3 CAPLUS
```

CN 1,6-Anthracenedisulfonic acid, 5-amino-8-[4-[[4-chloro-6-[p-[(3-chloro-2hydroxypropyl)sulfonyl]anilino]-s-triazin-2-yl]amino]-3-sulfoanilino]-9,10dihydro-9,10-dioxo-, trisodium salt (8CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

●3 Na

```
ANSWER 9 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
L4
AN
     1963:73987 CAPLUS
DN
     58:73987
OREF 58:12712d-h
TI
     Washfast dyes for textiles
     Farbwerke Hoechst A.-G.
PΑ
SO
     20 pp.
DT
     Patent
LA
     Unavailable
     PATENT NO.
                        KIND
                                DATE
                                           APPLICATION NO.
                                                                    DATE
                                -----
                         ----
P.I
     BE 617323
                                 19621107
                                            BE
     GB 1007752
                                             GB
     US 3223470
                                          US 1962-191439
                                 19651214
                                                                    19620501
PRAI DE
                                 19610506
     For diagram(s), see printed CA Issue.
GI
     Cellulose, wool, silk, and polyamides are dyed with compds. of the general
AB
     structure I, where Q is the residue of a water-soluble azo, anthraquinone, or
     phthalocyanine dye. Cyanuric chloride 18.4 in Me2CO 100 was added to
     crushed ice 400 parts with stirring. The mass was treated simultaneously
     with a solution of 3-H2NC6H4SO2CH2CH2OSO3H 28.1 and NaOAc.3H2O (II) 19 in H2O
     300 and a solution of II 14 in H2O 100 parts at 0-5° with stirring,
     stirred 1-2 hrs. until a sample no longer contained diazotizable compound,
     treated with a neutral solution of 2.5,7-H2N(HO)C10H5SO3H 23.9 and anhydrous
     Na2CO3 5.5 in H2O 250 followed by II 18 parts, gradually allowed to reach
     room temperature, stirred 20 hrs., treated with 40 parts II, coupled at room
     temperature with 17.3 parts 2-H2NC6H4SO3H as the diazonium salt, stirred
several
     hrs., and treated with NaCl to give I (m-HO3SOCH2CH2SO2, Q =
     1,2,3,6-HO-(HO3S)(ogr;-HO3SC6H4N:N)C10H4), a dark powder, dyeing cotton
     yarn in fast orange shades. Similarly, other I were prepared (position of
     sulfone substituent, QNH2, and shade given): 3, 1,8,3,-6,7-
     H2N(HO)(HO3S)2C10H3N:NC6H4SO3H-2, orange; 3, 1,8,-3,6,7-
     H2N(HO)(HO3S)2C10H3N:NC6H2(C1)(CO2H)SO3H - 4,5,2, red; 4, 1,8,6,7 -
     H2N(HO)(HO3S)C10H4N:NC6H4SO3H - 2, red; 4, 1,3,7,2 -
     HO(HO3S)(HO3SCH2CH2CONH)C10H4N:NC6H3-(NH2)SO3H-4,2, ruby-red; 4,
     1,8,3,6,7-BzNH(HO)(HO3S)2-C10H3N:NC6H3(NH2)SO3H-5,2, bluish red; 4,
     1,8,4,6,7-H2N-(HO)(HO3S)2C10H3N:NC5H4SO3H-2, red; 4, Cu complex of
     6,1,3,2-H2N(HO)(HO3S)C10H4N:NC5H3(OH)SO3H-2,5, ruby-red; 3,
     1-amino-(4-(amino-3-sulfoanilino)-2-anthraquinone-sulfonic acid, greenish
     blue; 4, Cu N, N', N'', N'''-tetrakis(4-amino-2-sulfophenyl)phthalocyaninetet
     rasulfonamide, turquoise blue; 4, 1,8,4,6,7-(XCONH)(HO)(HO3S)2C10H3N:NC6H 3(NH2)-SO3H-5,2 [X unspecified], brilliant red; 4, 6,1,3,2-H2N(HO)-
     (HO3S)C10H4N:NC5H3(C1)SO3H, scarlet.
IT
     104442-83-3, 2-Anthracenesulfonic acid, 1-amino-4-[4-[[4-chloro-6-
     [m-[(2-hydroxyethyl)sulfonyl]anilino]-s-triazin-2-yl]amino]-3-
     sulfoanilino]-9,10-dihydro-9,10-dioxo-, hydrogen sulfate
        (preparation of)
```

2-Anthracenesulfonic acid, 1-amino-4-[4-[[4-chloro-6-[m-[(2-

dihydro-9,10-dioxo-, hydrogen sulfate (7CI) (CA INDEX NAME)

hydroxyethyl)sulfonyl]anilino]-s-triazin-2-yl]amino]-3-sulfoanilino]-9,10-

RN

CN

104442-83-3 CAPLUS

$$_{\rm HO_3SO-CH_2-CH_2-S}$$
 $_{\rm NH}$
 $_{\rm NH_2}$
 $_{\rm O}$

=>	=>	a	que	19	stat				
L5				1	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	"SCHMIEDL JURGEN"/AU
L6				2	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	"SCHOEHN DAMIEN"/AU
L7				146					("KOCH KLAUS"/AU OR "KOCH
					KLA	JS D"/AU OR '	KOCH KL	AUS DIET	ER"/AU)
L8				148	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L5 OR L6 OR L7
L9				2	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L8 AND (ANTHRAQ? OR ANTHRAC?)

=> d 1-2 bib abs

```
ANSWER 1 OF 2 CAPLUS · COPYRIGHT 2006 ACS on STN
L9
        2004:493794 CAPLUS
AN
DN
        141:55763
        Reactive dyes for dyeing or printing synthetic fibers and their
ΤI
        preparation
        Schmiedl, Juergen; Schoehn, Damien; Koch, Klaus
IN
PA
        Ciba Specialty Chemicals Holding Inc., Switz.
SO
        PCT Int. Appl., 27 pp.
        CODEN: PIXXD2
DT
        Patent
        English
LA
FAN.CNT 1
        PATENT NO.
                                                                      APPLICATION NO.
                                        KIND
                                                   DATE
                                                                                                           DATE
                                        ----
                                                   ------
                                                                      -----
                                                                                                           ------
ΡI
        WO 2004050769
                                         A2
                                                   20040617
                                                                      WO 2003-EP50878
                                                                                                           20031124
        WO 2004050769
                                         Α3
                                                   20050526
              W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD,
                     TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
        AU 2003294033
                                         A1
                                                   20040623
                                                                      AU 2003-294033
                                                                                                           20031124
                                                                      EP 2003-789448
        EP 1567599
                                                   20050831
                                         A2
                                                                                                           20031124
                    AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
        BR 2003016841
                                                   20051018
                                                                      BR 2003-16841
                                         Α
                                                                                                           20031124
        CN 1720299
                                         Α
                                                   20060111
                                                                      CN 2003-80104773
                                                                                                           20031124
        JP 2006508225
                                         Т2
                                                   20060309
                                                                      JP 2004-556327
                                                                                                           20031124
        US 2006016027
                                         A1
                                                   20060126
                                                                      US 2005-536679
                                                                                                           20050527
PRAI EP 2002-406046
                                         Α
                                                   20021202
        WO 2003-EP50878
                                                   20031124
os
        MARPAT 141:55763
GI
```

AB The reactive dyes I (R1 = (un)substituted C1-4 alkyl; R2 = halogen, C1-4 alkyl, C1-4 alkoxy or sulfo; Z1 = -SO2Y, -CONH(CH2)kSO2Y, -NHCOCH(Hal)CH2Hal, -NHCOC(Hal):CH2; Hal = chlorine or bromine; Y = vinyl, -CH2CH2U; U = a group removable under alkaline conditions; k = 2-6, n = 0-2; m = 0 or 1) are suitable for dyeing or printing cellulose-containing fiber materials, preferably natural or synthetic polyamide fibers to give good fastness properties.

I

- L9 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 2003:40189 CAPLUS
- DN 138:91393
- TI Trichromic dyeing or printing of synthetic polyamide materials and reactive azo dyes therefor
- IN Schmiedl, Juergen; Koch, Klaus; Mundle, Wolfgang; Gruener, Franz
- PA Ciba Specialty Chemicals Holding Inc., Switz.
- SO Eur. Pat. Appl., 19 pp. CODEN: EPXXDW
- DT Patent
- LA German
- FAN.CNT 1

LAM.	TM T	1						
	PAT	TENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI	ΕP	1275700	A2	20030115	EP 2002-405560	20020704		
	ΕP	1275700	A3	20030716				
		R: AT, BE, CH	DE, DI	K, ES, FR,	GB, GR, IT, LI, LU, NL,	SE, MC, PT,		
		IE, SI, LT	LV, F	I, RO, MK,	CY, AL, TR, BG, CZ, EE,	SK		
	US	2003097721	A1	20030529	US 2002-192092	20020710		
	CN	1399032	A	20030226	CN 2002-140954	20020711		
	BR	2002002677	Α	20030506	BR 2002-2677	20020711		
	JP	2003096677	A2	20030403	JP 2002-203845	. 20020712		
	US	2004211013	A1	20041028	US 2004-847096	20040517		
	US	6930179	B2	20050816				
PRAI	CH	2001-1279	A	20010712	·			
	CH	2001-1987	Α	20011030				
	US	2002-192092	A3	20020710				

OS MARPAT 138:91393

AB Synthetic polyamide fibers are subjected to trichromic dyeing or printing using (a) at least one red chlorotriazine/vinyl sulfone sulfonaphthol azo dye, (b) at least one yellow or orange chlorotriazine/vinyl sulfone disulfonaphthalene azo dye, chlorotriazine/vinyl sulfone hydroxypyrimidinone azo dye; and/or chlorotriazine/vinyl sulfone sulfonaphthalene disazo dye, and (c) at least one blue chlorotriazine/vinyl sulfone anthraquinone dye. The dyeings show good evenness and no dichroism. In an example, 4-(2-sulfatoethylsulfonyl)aniline was condensed with cyanuric chloride and the product was condensed with 6-amino-5-(4-amino-2-sulfophenylazo)-4-hydroxy-2-naphthalenesulfonic acid to give a red dye, which was used in conjunction with yellow and blue reactive dyes on nylon 66.

=> d his full

(FILE 'HOME' ENTERED AT 12:01:24 ON 01 AUG 2006)

FILE 'REGISTRY' ENTERED AT 12:01:35 ON 01 AUG 2006 STRUCTURE UPLOADED T.1 L2 3 SEA SSS SAM L1 D SCAN 17 SEA SSS FUL L1 T.3 FILE 'CAPLUS' ENTERED AT 12:03:08 ON 01 AUG 2006 L49 SEA ABB=ON PLU=ON L3 D QUE L4 STAT D 1-9 BIB ABS HITSTR E SCHMIEDL JURGEN/AU 1 SEA ABB=ON PLU=ON "SCHMIEDL JURGEN"/AU L5 E SCHOEHN DAMIEN/AU L6 2 SEA ABB=ON PLU=ON "SCHOEHN DAMIEN"/AU E KOCH KLAUS/AU 146 SEA ABB=ON PLU=ON ("KOCH KLAUS"/AU OR "KOCH KLAUS D"/AU OR L7 "KOCH KLAUS DIETER"/AU) 148 SEA ABB=ON PLU=ON L5 OR L6 OR L7 L8

2 SEA ABB=ON PLU=ON L8 AND (ANTHRAO? OR ANTHRAC?)

FILE HOME

Ь9

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 31 JUL 2006 HIGHEST RN 897652-33-4 DICTIONARY FILE UPDATES: 31 JUL 2006 HIGHEST RN 897652-33-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

D QUE L9 STAT D 1-2 BIB ABS

FILE CAPLUS

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 1 Aug 2006 VOL 145 ISS 6 FILE LAST UPDATED: 31 Jul 2006 (20060731/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=>